

REMARKS

In response to the Office Action dated February 15, 2005, Applicant respectfully requests reconsideration and withdrawal of the rejections of the claims.

The Office Action states that the Information Disclosure Statement filed August 15, 2001 fails to comply with the applicable regulations "because sheet 2 of 2 is missing." It is not clear what is meant by this statement, and particularly what "sheet 2 of 2" refers to. A check of the PAIR site for the subject application reveals that the complete Information Disclosure Statement has been received by the Patent and Trademark Office. This Information Disclosure Statement consists of a one-page transmittal form, a two-page document entitled "Information Disclosure Statement" listing five U.S. patents on the first page and three non-patent literature documents on the second page, and a one-page Form 1449 listing the same documents. For the Examiner's reference, a copy of those four pages, as printed from the PTO image file wrapper, is submitted with this response.

If the Examiner remains of the opinion that the Information Disclosure Statement fails to comply with the regulations, he is respectfully requested to identify, with particularity, the information that is believed to be missing. In particular, he is requested to explain what document "sheet 2 of 2" is believed to be missing from.

Claims 1-14 were rejected under the second paragraph of 35 U.S.C. §112, on the grounds that they were considered to be indefinite. The rejection states that the recitation of "the product" in claims 1 and 9 lacks sufficient antecedent basis. The recitation of "the product" in these two claims refers to a mathematical operation, i.e.,

multiplication of two values. It is not referring to a structural element, namely a physical product, that might require antecedent support. It is respectfully submitted that a person of ordinary skill in the art would readily understand that the recitation of "the product of said first flow time and said coefficient value," as set forth in claim 1, is referring to the result obtained by multiplying these two values. Accordingly, it is respectfully submitted that these claims are definite, as presented. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims 1-8 were rejected under 35 U.S.C. §101, on the grounds that they were considered to be directed to non-statutory subject matter. To remove the basis for this rejection, claim 1 has been amended to explicitly recite that the claimed method is implemented in a computer. Reconsideration and withdrawal of this ground of rejection is respectfully requested.

Claims 9-14 were rejected under 35 U.S.C. §102, on the grounds that they were considered to be anticipated by the article by Faaland et al entitled "Scheduling Tasks With Due Dates in a Fabrication/Assembly Process." Claims 1-7 were rejected under 35 U.S.C. §103 as being unpatentable over the Faaland et al article in view of the Fox patent (U.S. 5,890,134). Claim 8 was not rejected on the basis of prior art.

It is respectfully submitted that the Faaland article neither anticipates, nor otherwise suggests, the claimed subject matter. Rather, it describes a significantly different algorithm, for accomplishing a different purpose. The objective of the algorithm disclosed in the Faaland article is to minimize two components, a carrying cost component and a goodwill/opportunity cost component. The first component

has to do with minimizing early tasks, and hence excess inventory. The second component is directed to minimization of late deliveries. See, for example, the description of $Q(x)$ at the top of page 379, right column. The claimed subject matter, in contrast, seeks to control the tradeoff between flow time and delivery date. Thus, the Faaland et al article is concerned with the problem of finding a reasonable timing for tasks, in order to minimize costs associated with inventory and lateness, given an a priori heuristic for ordering tasks on work centers. In contrast, the claimed invention is concerned with determining the earliest possible start (and therefore completion) time for projects, given a maximum acceptable expansion of the flow time for individual projects.

As set forth in MPEP §2131, "to anticipate a claim, the reference must teach every element of the claim." It is respectfully submitted that the Faaland et al article does not meet this criterion. For example, one of the features recited in claim 9 is a means for receiving a user-defined flow expansion coefficient value. Applicant is unable to find any disclosure of this concept in the Faaland article, and the Office Action does not identify how the article could be interpreted to teach such a feature.

The claim also recites the calculation of first and second flow times, one of which considers inter-project constraints on resources, and the other of which does not. Again, it is not apparent how the Faaland article can be interpreted to teach the determination of these two different flow times.

The claim further recites that the product of the flow expansion coefficient value and one of the flow times is compared to the other flow time. There is no

teaching in the Faaland article to generate such a product, nor to perform such a comparison.

Finally, claim 9 recites a means for designating a different start time if the product is not greater than or equal to the second flow time. The Office Action does not identify where this claimed feature is deemed to be taught by the reference. In fact, the Faaland article explicitly avoids the resequencing of tasks on resources during the iterative process of phase 2. Instead, that is done during phase 1 (see page 379, last two full paragraphs). There is therefore no feasible way that the algorithm can minimize flow time for an individual project in the presence of any significant resource contention, since the sequencing (and hence interleaving) of tasks on resources is fixed by the time the iterative algorithm begins.

In view of the foregoing, it is respectfully submitted that the Faaland et al article does not anticipate the subject matter recited in claim 9. Consequently, it cannot anticipate dependent claims 10-14.

For similar reasons, the Faaland et al article does not suggest the subject matter of method claims 1-7, whether considered by itself or in combination with the Fox patent. The rejection of claims 1-7 alleges that the Faaland article discloses all of the claimed limitations, with the exception of iteratively repeating certain steps. However, as pointed out above, the Faaland et al article does not teach a number of the claimed steps that determine a maximum flow time for a project.

The Fox patent does not contain any teachings that would overcome the deficiencies of the Faaland et al article. Like the Faaland article, it has nothing to do with project flow times. Rather, it is concerned with improving the sequencing on


work centers to improve an individual project completion date. Thus, any possible application of the Fox patent to the teachings of the Faaland article would still not result in the claimed invention.

For the foregoing reasons, it is respectfully submitted that all pending claims are patentably distinct from the Faaland article, whether considered by itself or in combination with the Fox patent. Reconsideration and withdrawal of the rejections are therefore respectfully requested. If any of the grounds of rejection based upon the Faaland article are maintained, the Examiner is requested to identify, with particularity, where each feature recited in the claims is deemed to be taught by the Faaland article, rather than generically referring to the article as a whole.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By: 
James A. LaBarre
Registration No. 28,632

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620